

### REMARKS

The Applicants thank the Examiner for the careful analysis of the specification and claim in this case. Only one claim is pending in the case and the claim stands rejected for anticipation by two independent references, Joshi (USP 5,567,287) and Bolick (USP 4,992,147) under 35 U.S.C. 102(b). The Applicants submit that the housing for an electrolytic cell taught by the instant application is clearly distinct from the teachings of both Bolick and Joshi and that the rejection should be withdrawn.

The flexible membrane of the subject application, as specified in claim 37, is a container for the electrolyte contained within the device, electrolysis of which electrolyte generates nitrogen gas. The volume of the container defined by the membrane shrinks as the volume of electrolyte shrinks, the goal being to thereby preserve good electrochemical contacts even though the volume of electrolyte falls (page 4, lines 9 to 14). Although the two prior art documents cited by the examiner do refer to flexible membranes these membranes are not structurally or functionally equivalent to the flexible membrane of the subject application.

Joshi et al. is referenced at page 2 of the subject application. Joshi is directed to a pump driven by the electrolytic generation of gases, and the claims are directed to a "fluid dispensing micropump". Joshi explains the purpose of the flexible membrane referenced by the examiner (at column 3, lines 37-42; column 10, lines 28-29) as being a sack to contain a fluid to be dispersed by the pump. The Joshi membrane is a structural component of the pump, not of the electrolytic cell. As gas in the pump expands, the membrane of Joshi is displaced and thereby forces fluid out of the pump (column 3, lines 39 to 42).

In contrast, claim 37 of the subject application defines the role of the flexible membrane component as being to accommodate volume changes of the electrolyte, for the reasons given above. The flexible membranes of Joshi and the subject application therefore have completely different functional and structural roles and are in no way

equivalent. As Joshi does not disclose an electrolytic cell structure in which the electrolyte is contained by a flexible membrane adapted to accommodate compression of the electrolyte, Joshi cannot anticipate claim 37 of the subject application.

Bolick et al. is directed to the electrolysis of an aqueous catholyte solution to produce an alkali metal hydrosulfite. The flexible membrane indicated by the examiner is a cation exchange membrane which serves to separate the cathode and anode compartments and prevent migration of sulfur containing ions from the cathode compartment into the anode compartment (column 6, lines 14-18). As indicated, the membrane of the subject application is structurally and functionally quite different and this is explicit in the language of claim 37. Bolick does not disclose an electrolytic cell structure in which the electrolyte is contained by a flexible membrane adapted to accommodate compression of the electrolyte and Bolick therefore cannot anticipate claim 37 of the subject application.

In view of the forgoing arguments, the Applicants submit that the rejections under 35 U.S.C. 102(b) are traversed and request that a notice of allowance be issued in this case.

The Applicants have included a reference to the parent application in this case to be inserted into the specification. The parent application was referenced at the time of the filing of the instant application on the Patent Application Transmittal. Therefore, the inclusion of the statement in the text does not constitute new matter.

### **FEES**

The Applicants have enclosed a check in the amount of \$55 for the fee for a one month extension. It is believed that there are no other fees due with this response. However, if a fee is due, the Commissioner is hereby entitled to charge deposit account 02-4070 referencing case number 6510-PA04D.

### CONCLUSIONS

The Applicants believe that the case is now in proper form for allowance and request that the rejections be withdrawn by the Examiner. However, if the Examiner believes that any outstanding issues remain in the case that could be resolved by telephone, the Examiner is invited to contact the Agent for Applicant listed below, collect to resolve the issue.

Respectfully submitted,

Dated: February 25, 2004

By: \_\_\_\_\_



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